

Application No. 10/695,225
Amendment Dated Jan. 11, 2006
Reply to Office Action of Oct. 16, 2006
Attorney Docket No. 4819-031812
Response Under 37 CFR § 1.116
Expedited Examining Procedure
Examining Group 1700

REMARKS

Claims 5-7 have been cancelled.

Claims 1-4 remain in the application.

The Examiner's principal reference is Okamura et al. U.S. Patent No. 6,310,762. The Applicants' submit that this is not a proper reference for a rejection under 35 U.S.C. § 103 because the Okamura et al. patent and the inventions claimed in the application were, at the time the claimed invention was made, owned by the same entity were subject to an obligation to assign. The Examiner found the Applicants' showing to support this contention insufficient. The Applicants' have now submitted a Declaration that should, along with the materials already submitted, satisfy the Examiner. The Declaration is signed by three of the four common inventors (the fourth common inventor has retired and cannot be located).

The Examiner has suggested that if Okamura et al. is not a proper reference, the Chang article is "now presented."

The Examiner has rejected claims 1-4 under 35 U.S.C. § 103(a) as unpatentable over Okamura (or the Chang article) in view of Abe et al. U.S. Patent No. 5,338,462. The Examiner states:

Okamura is silent as to whether the alkali is removed. Regarding claim 2, Okamura '762 does not teach or suggest the additional heat treatment in a reducing atmosphere as recited in claim 2. However, Abe '462 does teach heat treatment of an already activated and washed carbon. Abe discloses an acid wash treatment to remove the impurities, followed by a washing step and a heat treatment step that is performed at 400°C - 1,000°C under a reducing atmosphere (see column 14, line 66 - column 15, line 3). It would have been obvious to one of ordinary skill in the art at the time of this invention to

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subject the activated carbon of Okamura to the washing and extra heat treatment step of Abe in order to produce an enhanced activated carbon as suggested by Abe.

Reconsideration is respectfully requested.

In view of the Declaration enclosed herewith and the prior submissions, the Okamura et al. reference is not a proper reference under 35 U.S.C. § 103 and should be withdrawn.

The Chang article is not a substitute for the Okamura et al. patent as it does not teach the step of treating with caustic alkali. Further, there would be no logical reason to treat specimens from an oxidation-resistant experiment with caustic alkali. There being no caustic alkali, there is no reason to consider a step to remove the caustic alkali. The Abe et al. reference does not suggest treatment with caustic alkali nor removal of caustic alkali.

The Examiner has rejected claims 1-4 under 35 U.S.C. § 103(a) as unpatentable over Okamura et al. in view of Wallis U.S. Patent No. 3,770,625 or D'Sidocky U.S. Patent No. 4,392,004. As already urged, Okamura et al. is not a proper reference and Chang does not teach treatment with alkali.

The secondary references teach the presence of sodium hydroxide on the surface of activated carbon to assist in capture of substances by the activated carbon. They do not teach or suggest treating calcine carbon with caustic alkali at 800°C-900°C. As explained in the Applicants' specification as paragraph [0059], at these temperatures, the carbon reduces the alkali to a metallic state and the metals form a vapor that can penetrate deep into the carbon structure.

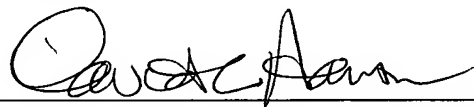
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The intention of these secondary references is to have the alkali in place during the capture of substances by the activating carbon. Therefore, it would illogical to combine these references with Abe et al. which teaches removal of the alkali. The function proposed for these secondary references would be eliminated if followed by the practice suggested by Abe et al.

In view of the foregoing remarks and the submitted Declaration, it is urged this case is now in condition for allowance.

Respectfully submitted,

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